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Voluntary - Public

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India

Post: New Delhi

Monsoon Recovery in August Improves Soil Moisture in Central India

Report Categories:

Agriculture in the Economy

Agriculture in the News

Climate Change/Global Warming/Food Security

Policy and Program Announcements

Cotton and Products

Grain and Feed

Oilseeds and Products

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Report Highlights:

The recovery of monsoon rain levels in August has led to improved soil moisture in Central India which will bolster crop development. *Kharif 2019* planting is two percent slower than last year, with planted area for all major crops lower except cotton. The Indian Meteorological Department forecasts intensive rains in the next few weeks which could lead to flood damage in select areas. The cumulative rainfall for the southwest monsoon 2019 reported by the IMD is currently equal to the fifty-year average rainfall level.

General Information:

According to the Indian Meteorological Department (IMD), overall monsoon rains in India are currently at the same level as the long period average (LPA). Until the end of July 2018, the rainfall was nine percent lower than LPA, however, monsoon rains intensified in August with rainfall 16 percent above the average for the month. After August, the southwest rains usually start withdrawing from early September until the end of October, signaling the end of the four-month season that starts in June. IMD has forecast normal rains in the second half of the monsoon (August to September).

Weather Outlook for next two weeks (August 29 to September 11)

As per the five-day rainfall forecast published by IMD on August 31, active monsoon conditions are likely to prevail over east and central India during August 31- September 4. Fairly widespread rainfall with isolated heavy to very heavy falls is likely over Odisha, Chhattisgarh, Madhya Pradesh and East Rajasthan during this period. Along with this, the Western Ghats of Karnataka and Maharashtra are also likely to experience fairly widespread rainfall in addition to coastal Andhra Pradesh and Telangana.

Cumulative rains during August 29 to September 4 are expected to be above normal in East Rajasthan, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Vidarbha, Telangana, Andhra Pradesh, Odisha, Lakshadweep and Andaman & Nicobar Islands. Farmers have been issued advisories to avoid intercultural operations (between sowing and harvesting), and the application of plant protection measures and fertilizers to standing crops. These advisories are suggesting to farmers to secure adequate drainage in their fields to avoid floods. For more details please refer [National AAS Bulletin Current - August 30, 2019](#).

During the second week of this month (September 5 to 11), above normal rainfall activity is likely over Western Himalayan Region, Punjab, Haryana, Chandigarh & Delhi, Rajasthan, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Vidarbha, West Coast, Odisha, Lakshadweep and Andaman & Nicobar Islands.

Kharif 2019 Sowing Progress

According to the Ministry of Agriculture and Farmers Welfare's (MOAFW) [August 30, 2019 report](#), the overall planting for *Kharif 2019* season is two percent lower than last year, due to delayed rains during the first half of monsoon. Planting for all major crops is lower compared to last year except for cotton. The planted area under cotton has increased by six percent from last year, indicating farmer preference for cotton due to the high market prices as compared to other crops. Based on the sowing reports, farmers have shifted away from pulses in Maharashtra, and coarse cereals in Rajasthan towards cotton. In the southern state of Tamil Nadu, farmers have been issued advisories to undertake the planting of rain fed cotton in anticipation of expected rainfall. As such, there will likely be additional cotton area at a later stage of the season.

Improved reservoir storage levels than last year

As per [reservoir storage bulletin dated August 29, 2019](#), live storage available in the 107 reservoirs is 126.631 billion cubic meters (BCM), which is 76 percent of total live storage capacity of these reservoirs. The overall storage position is better than the corresponding period of last year in the country as a whole and is also better than the average storage of last ten years during the corresponding period.

States with higher water storage levels (in percentage) than last year for the corresponding period are

Himachal Pradesh, Punjab, Rajasthan, Gujarat, Maharashtra, Uttarakhand, Madhya Pradesh, Andhra Pradesh and Telangana (Two combined projects in both states), Andhra Pradesh and Karnataka. States with less storage (in percentage) than last year are Jharkhand, Odisha, Tripura, West Bengal, Nagaland, Uttar Pradesh, Chhattisgarh, Telangana, Kerala and Tamil Nadu.

Table 1. India: Kharif 2019 Sown Area (in million hectares)

Crop	Area sown in 2019 on Aug 30, 2019	Area sown in 2018 on Aug 30, 2018	Normal Area on Aug 30**	Y-o-Y Change	Change from Normal
Rice	35.484	37.242	36.699	-4.7%	-3.3%
Pulses	12.799	13.154	12.099	-2.7%	5.8%
Coarse Cereals	17.174	17.173	17.492	0.0%	-1.8%
Oilseeds	17.078	17.115	17.3991	-0.2%	-1.8%
Sugarcane	5.241	5.547	5.019	-5.5%	4.4%
Jute and Mesta	0.684	0.720	0.739	-5.0%	-7.4%
Cotton	12.490	11.766	11.543	6.2%	8.2%
Total	100.950	102.717	100.989	-1.7%	0.0%

Source: Ministry of Agriculture and Farmers Welfare, Government of India

** Normal Area is the five-year average of the area from 2014-2018

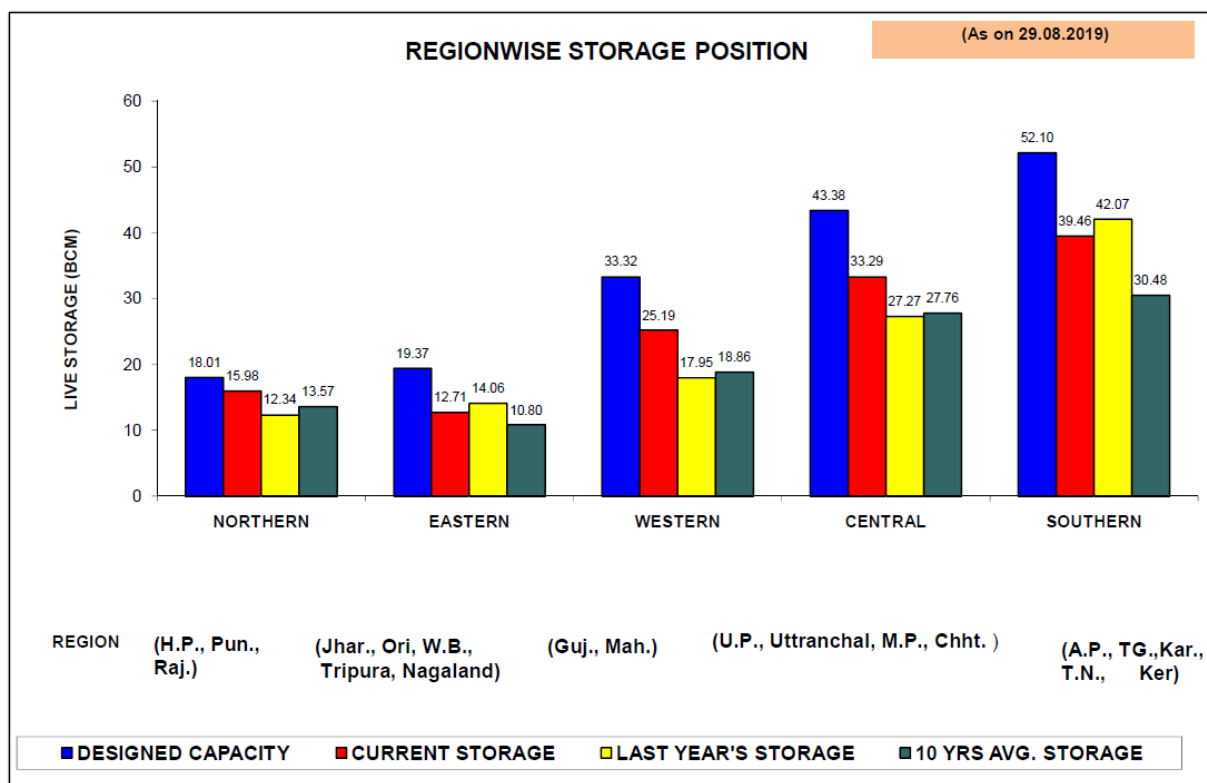
**Table 2. India: Southwest Monsoon Regional Rainfall Distribution
June 1-August 31, 2019**

Regions	2019 Actual (mm)	Normal (mm)	2019 Percentage Departure from Normal
Northwest India	465.2	490.2	-5%
Central India	895.7	799.3	+12%
Southern Peninsula	602.8	566.1	+6%
East and Northeast India	916.8	1125.1	-19%
All India	709.1	710.4	0%

* Normal rainfall is the fifty-year average of rainfall from 1951-2000

Source: Indian Meteorological Department

Image 1. India: Storage Status at 107 Major Reservoirs in Billion Cubic Meters (BCM) as on August 28, 2019



Source: Central Water Commission, Ministry of Jal Shakti

Image 2: India: Monthly Rainfall Statistics in mm (southwest monsoon 2019)

RAINFALL STATISTICS - MONSOON 2019

JUNE - 2019			
REGION	1- Jun	TO	30-Jun
ACTUAL	NORMAL	% DEP	
COUNTRY AS A WHOLE	112.1	166.9	-32.8
NORTHWEST INDIA	51.0	75.3	-32.2
EAST & NORTHEAST INDIA	218.2	347.1	-37.1
CENTRAL INDIA	117.3	169.2	-30.7
SOUTH PENINSULA	112.8	160.2	-29.6

JULY - 2019			
REGION	1- Jul	TO	31-Jul
ACTUAL	NORMAL	% DEP	
COUNTRY AS A WHOLE	298.3	285.3	4.6
NORTHWEST INDIA	214.7	212.2	1.2
EAST & NORTHEAST INDIA	478.4	432.0	10.7
CENTRAL INDIA	350.4	322.8	8.6
SOUTH PENINSULA	193.9	216.7	-10.5

AUGUST -2019			
REGION	1- Aug	TO	31-Aug
ACTUAL	NORMAL	% DEP	
COUNTRY AS A WHOLE	298.6	258.1	15.7
NORTHWEST INDIA	199.5	202.6	-1.6
EAST & NORTHEAST INDIA	219.5	346.0	-36.5
CENTRAL INDIA	428.0	307.3	39.3
SOUTH PENINSULA	296.1	189.2	56.5

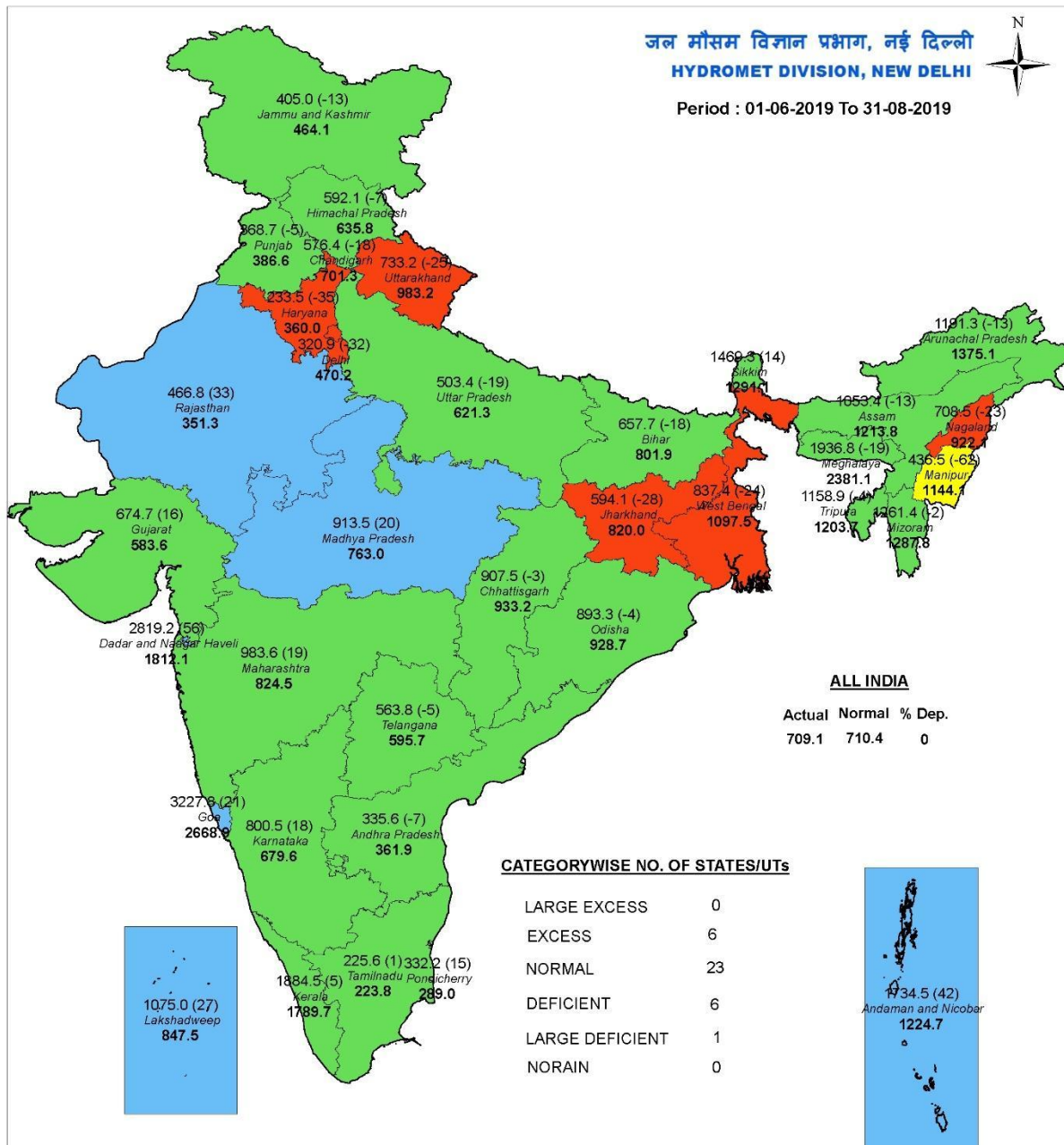
CUMULATIVE SEASONAL RAINFALL			
REGION	1- Jun	TO	31-Aug
ACTUAL	NORMAL	% DEP	
COUNTRY AS A WHOLE	709.1	710.4	-0.2
NORTHWEST INDIA	465.2	490.2	-5.1
EAST & NORTHEAST INDIA	916.8	1125.1	-18.5
CENTRAL INDIA	895.7	799.3	12.1
SOUTH PENINSULA	602.8	566.1	6.5

* Normal rainfall is the fifty-year average of rainfall from 1951-2000

Source: Indian Meteorological Department



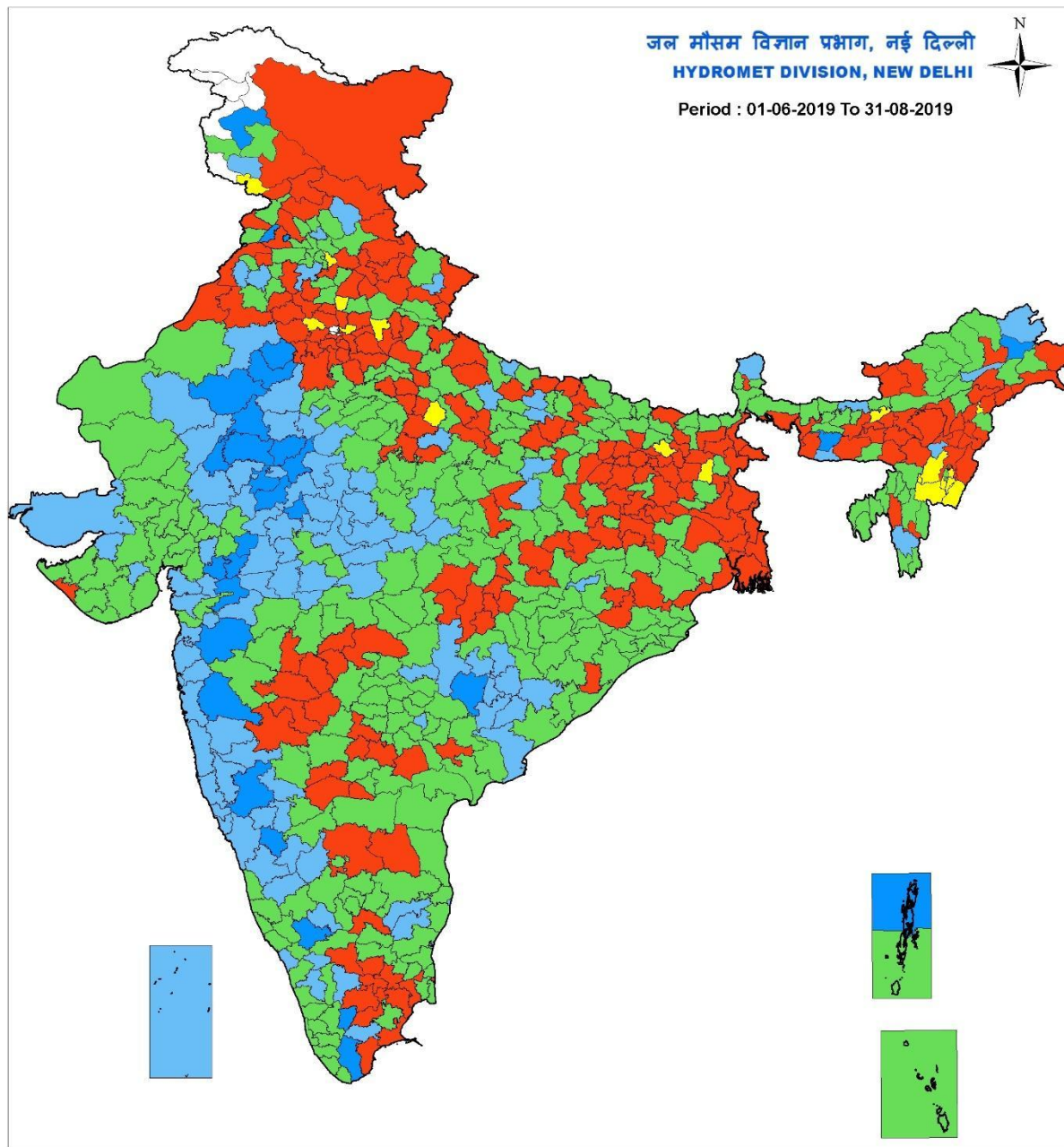
STATE RAINFALL MAP





भारत मौसम विज्ञान विभाग
INDIA METEOROLOGICAL DEPARTMENT

DISTRICT RAINFALL MAP



Legend

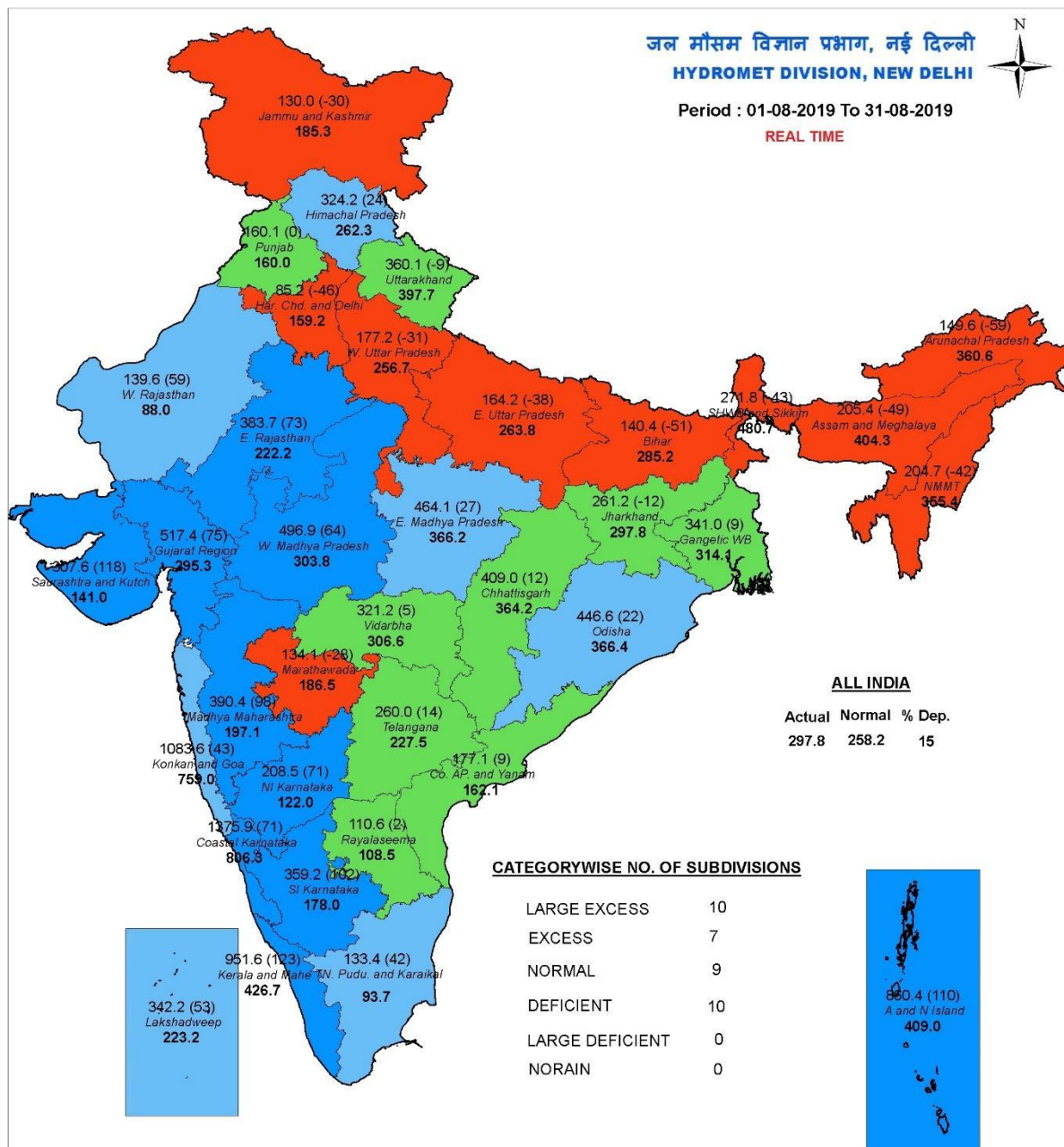
Large Excess [60% or more] Excess [20% to 59%] Normal [-19% to 19%] Deficient [-59% to -20%] Large Deficient [-99% to -60%] No Data [-100%] No Rain

NOTES :

a) RainFall figures are based on operation data.




SUBDIVISION RAINFALL MAP





PROGRESS OF MONSOON 2019 WEEK BY WEEK


S.NO	MET.SUBDIVISION	WEEK ENDINGS														
		5-Jun	12-Jun	19-Jun	26-Jun	3-Jul	10-Jul	17-Jul	24-Jul	31-Jul	7-Aug	14-Aug	21-Aug	28-Aug	4-Sep	11-Sep
1	A & N ISLANDS															
2	ARUNACHAL PRADESH															
3	ASSAM & MEGHALAYA															
4	NAG., MANI., MIZO & TRIPURA															
5	S.H.W.B. & SIKKIM															
6	GANGATIC W.B.															
7	ODISHA															
8	JHARKHAND															
9	BIHAR															
10	EAST U.P.															
11	WEST U.P.															
12	UTTARAKHAND															
13	HAR., CHANDI. & DELHI															
14	PUNJAB															
15	HIMACHAL PRADESH															
16	JAMMU & KASHMIR															
17	WEST RAJASTHAN															
18	EAST RAJASTHAN															
19	WEST M.P.															
20	EAST M.P.															
21	GUJARAT REGION															
22	SAURASHTRA & KUTCH															
23	KONKAN & GOA															
24	MADHYA M'RASHTRA															
25	MARATHAWADA															
26	VIDARBHA															
27	CHATTISGARH															
28	COASTAL A.P.															
29	TELANGANA															
30	RAYALASEEMA															
31	TAMIL NADU															
32	COASTAL KARNATAKA															
33	N.I.KARNATAKA															
34	S.I.KARNATAKA															
35	KERALA															
36	LAKSHADWEEP															


LEGEND:


 LARGE EXCESS
+60% OR MORE

 EXCESS
+20% TO +59%

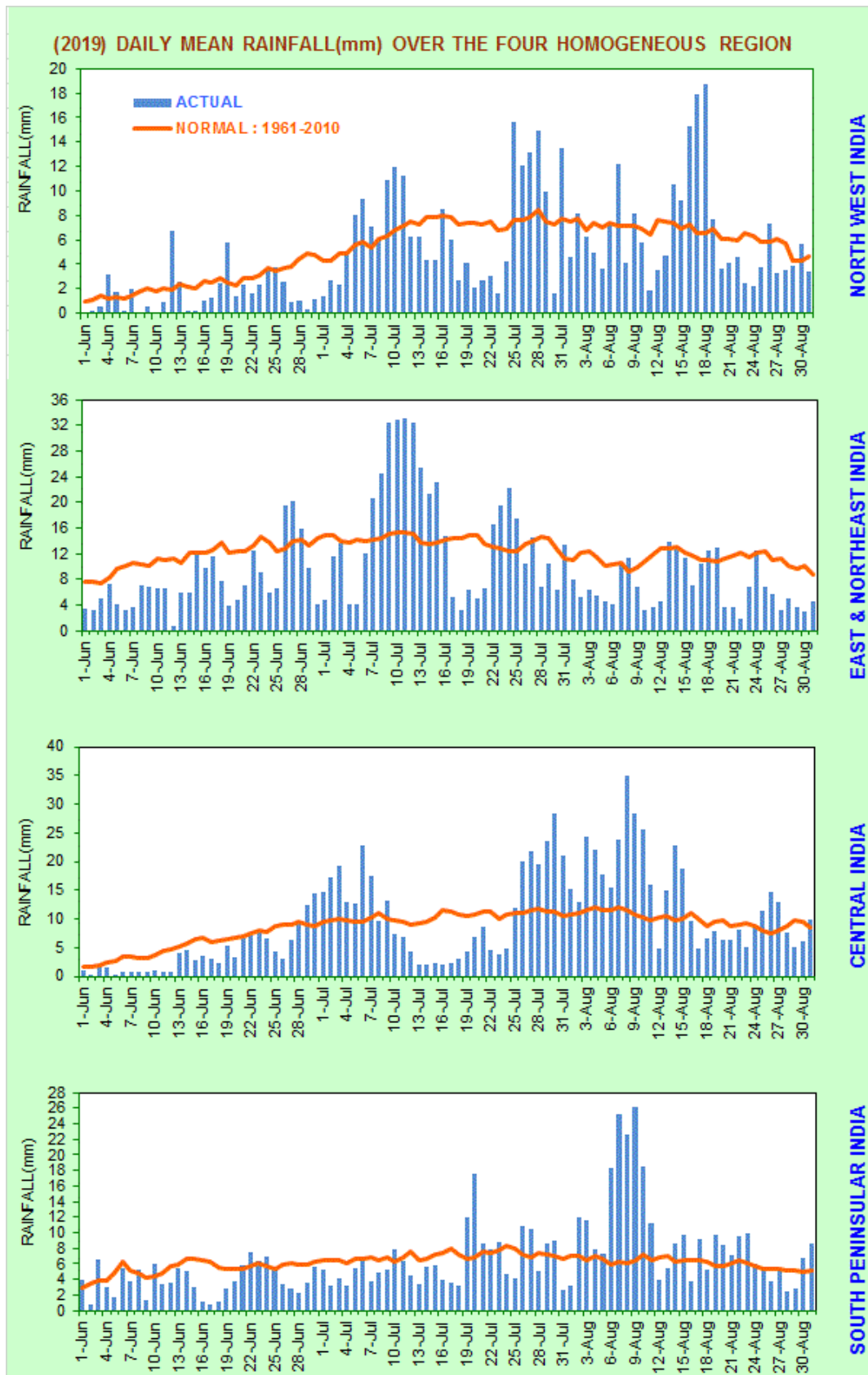
 NORMAL
+19% TO -19%

 DEFICIENT
-20% TO -59%

 LARGE DEFICIENT
-60% OR LESS

 NO RAIN

(वास्तविक समय के आंकड़ों पर आधारित)





India Meteorological Department
Hydromet Division, New Delhi

STATE-WISE RAINFALL DISTRIBUTION

		Week:22-08-2019 To 28-08-2019				Period:01-06-2019 To 28-08-2019			
S NO	MET. SUBDIVISION/UT/STATE/DISTRICT	ACTUAL (mm)	NORMAL (mm)	%DEP.	CAT.	ACTUAL (mm)	NORMAL (mm)	% DEP.	CAT.
REGION : EAST AND NORTH EAST INDIA									
1	ARUNACHAL PRADESH	25.5	85.6	-70%	LD	1182.2	1346.2	-12%	N
2	ASSAM	37.5	83.0	-55%	D	1033.0	1182.0	-13%	N
3	MEGHALAYA	49.7	155.0	-68%	LD	1930.3	2334.9	-17%	N
4	NAGALAND	21.0	64.5	-67%	LD	696.2	893.8	-22%	D
5	MANIPUR	16.0	65.1	-75%	LD	431.0	1115.3	-61%	LD
6	MIZORAM	79.4	93.3	-15%	N	1253.4	1254.5	0%	N
7	TRIPURA	42.2	75.2	-44%	D	1149.4	1175.0	-2%	N
8	SIKKIM	37.8	96.0	-61%	LD	1421.7	1253.1	13%	N
9	WEST BENGAL	62.6	82.5	-24%	D	825.1	1066.6	-23%	D
10	JHARKHAND	51.6	62.2	-17%	N	585.6	797.3	-27%	D
11	BIHAR	28.8	72.1	-60%	LD	656.1	780.2	-16%	N
REGION : NORTH WEST INDIA									
1	UTTAR PRADESH	48.1	58.7	-18%	N	497.4	602.9	-17%	N
2	UTTARAKHAND	40.1	80.1	-50%	D	707.9	954.1	-26%	D
3	HARYANA	5.6	34.7	-84%	LD	232.8	351.5	-34%	D
4	CHANDIGARH (UT)	63.5	49.8	28%	E	576.3	693.8	-17%	N
5	DELHI (UT)	11.7	41.5	-72%	LD	320.9	459.1	-30%	D
6	PUNJAB	6.7	30.3	-78%	LD	364.5	377.8	-4%	N
7	HIMACHAL PRADESH	23.5	49.3	-52%	D	580.5	620.0	-6%	N
8	JAMMU & KASHMIR	9.9	39.1	-75%	LD	395.1	452.8	-13%	N
9	RAJASTHAN	27.8	28.6	-3%	N	446.3	341.7	31%	E
REGION : CENTRAL INDIA									
1	ODISHA	78.8	73.2	8%	N	873.9	896.2	-2%	N
2	MADHYA PRADESH	116.7	63.3	84%	LE	889.6	732.5	21%	E
3	GUJARAT	25.9	36.8	-30%	D	657.3	561.1	17%	N
4	DADAR & NAGAR HAVELI (UT)	74.5	108.3	-31%	D	2808.2	1749.9	60%	LE
5	DAMAN & DIU (UT)	24.7	74.8	-67%	LD	1524.5	1319.0	16%	N
6	GOA	107.3	100.0	7%	N	3152.8	2624.7	20%	E
7	MAHARASHTRA	39.0	56.1	-31%	D	963.6	800.9	20%	E
8	CHHATTISGARH	73.7	71.5	3%	N	886.4	901.4	-2%	N
REGION : SOUTH PENINSULA									
1	ANDAMAN & NICOBAR (UT)	298.7	93.3	220%	LE	1610.7	1183.8	36%	E
2	ANDHRA PRADESH	29.7	32.9	-10%	N	329.1	348.9	-6%	N
3	TELANGANA	38.2	42.6	-10%	N	541.7	575.1	-6%	N
4	TAMIL NADU	20.5	26.1	-21%	D	218.3	214.6	2%	N
5	PONDICHERRY (UT)	52.7	32.3	63%	LE	329.7	277.7	19%	N
6	KARNATAKA	34.3	41.0	-16%	N	782.1	665.0	18%	N
7	KERALA	155.7	78.8	98%	LE	1816.5	1762.5	3%	N
8	LAKSHADWEEP (UT)	152.0	51.4	196%	LE	1041.4	823.9	26%	E
COUNTRY :		46.0	53.3	-14%		693.0	689.4	1%	

CATEGORYWISE DISTRIBUTION OF NO.OF STATES

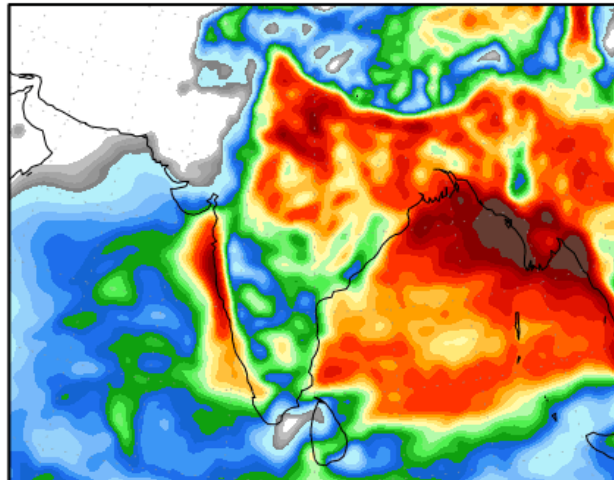
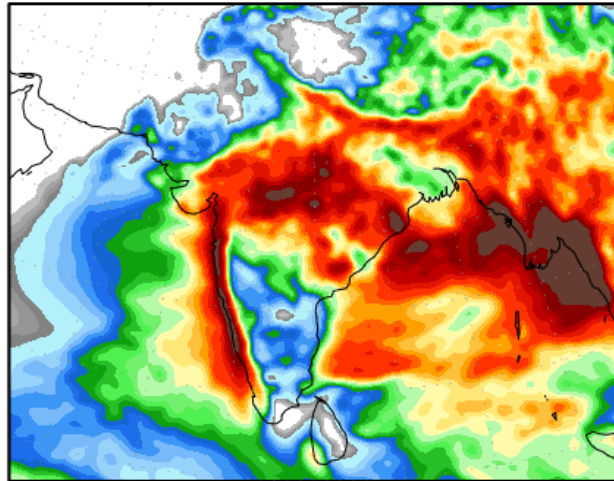
CATEGORY	Week:22-08-2019 To 28-08-2019	Period:01-06-2019 To 28-08-2019
	NO.OF STATES	NO.OF STATES
Large Excess	5	1
Excess	1	6
Normal	10	22
Deficient	9	6
Large Deficient	11	1
NoRain	0	0
NoData	0	0

Precipitation Forecasts

Precipitation (mm)
during the period:

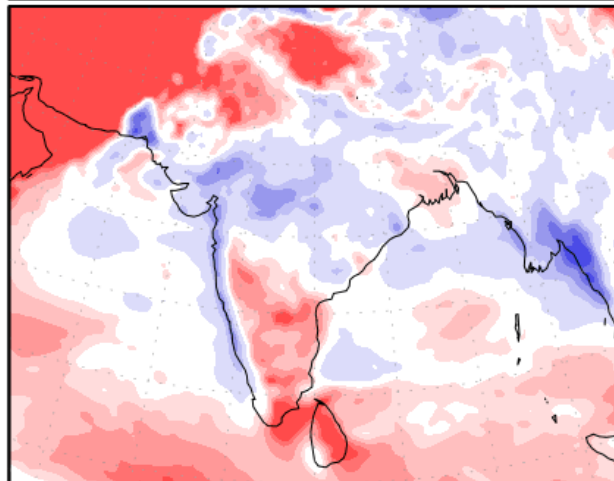
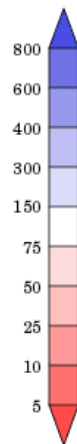
Mon, 02 SEP 2019 at 00Z
-to-
Tue, 10 SEP 2019 at 00Z

Tue, 10 SEP 2019 at 00Z
-to-
Wed, 18 SEP 2019 at 00Z



Precipitation (% of normal)
during the first period:

Mon, 02 SEP 2019 at 00Z
-to-
Tue, 10 SEP 2019 at 00Z



Precipitation forecasts from the National Centers for Environmental Prediction.
Normal rainfall derived from Xie-Arkin (CMAP) Monthly Climatology for 1979-2003.
Forecast Initialization Time: 00Z02SEP2019